**Table 1.** Average AUC and P-values calculated by Friedman's and Nemenyi test on Text data sets (Setting: **3 labeled instances**, 50 attributes, Naïve Bayes)

	Sim	Ran	Entr	Co-	Un			
	$\mathbf{ple}$	$\mathbf{dom}$	$\mathbf{opy}$	Style	$\mathbf{Sup}$	$\mathbf{Self}$	Ours	Ideal
fbis.wc.arff(111,142)	0.87	0.929	0.93	0.937	0.991	0.995	0.997	0.995
fbis.wc.arff(111,189)	0.964	0.985	0.983	0.939	1	1	0.999	1
fbis.wc.arff(142,189)	0.941	0.93	0.922	0.928	0.974	0.963	0.998	0.973
new3s.wc(111,142)	0.898	0.907	0.926	0.944	0.98	0.996	0.996	0.998
new3s.wc(189,142)	0.872	0.919	0.923	0.906	0.932	0.976	0.992	0.987
new3s.wc(189,301)	0.929	0.787	0.801	0.873	0.938	0.928	0.961	0.957
ohscal.wc(An,Ca)	0.719	0.899	0.889	0.751	0.941	0.961	0.974	0.975
ohscal.wc(An,Dn)	0.772	0.781	0.736	0.768	0.843	0.846	0.943	0.946
ohscal.wc(Ca,Dn)	0.781	0.901	0.879	0.748	0.94	0.936	0.963	0.961
ohscal.wc(Ca, To)	0.718	0.776	0.747	0.699	0.924	0.929	0.958	0.944
units_ACEInhibitors	0.702	0.694	0.704	0.692	0.7	0.741	0.763	0.755
$\mathrm{units\_ADHD}$	0.886	0.876	0.921	0.856	0.956	0.939	0.959	0.96
units_AtypicalAntipsychotics	0.633	0.627	0.636	0.622	0.658	0.689	0.663	0.709
units_ProtonPumpInhibitors	0.654	0.672	0.693	0.636	0.701	0.779	0.783	0.786
$units\_Statins$	0.663	0.602	0.643	0.73	0.654	0.672	0.728	0.802
${f Average}$	0.8	0.819	0.822	0.802	0.875	0.89	0.912	0.917
Methods I	P-valu	<u>e</u>	_	Meth	$\overline{\mathrm{ods}}$	P-v	alue	
Ours - Co-Style 5.8	321481	e-06		Ours -	Ideal	0.9916	3245971	
Ours - Entropy 4.8	305973	e-03		Ours -	Self	0.0249	9834276	
Ours - Random 1.3	81133	e-03	(	Ours - U	JnSup	0.0008	8691466	
Ours - Simple 7.3	303006	e-05		Self -	Ideal	0.0103	3920166	
Entropy - Co-Style 5.6	317145	e-01	Ţ	JnSup -	- Ideal	0.0002	2028328	
Random - Co-Style 7.7	71378	e-01		UnSup	- Self	0.7433	3663827	
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Entropy Co-Style

UnSup

**Table 2.** Average AUC and P-values calculated by Friedman's and Nemenyi test on Text(**Benchmark Setting**: 5 labeled instances, 50 attributes, Naïve B)

	Sim	Ran	Entr	Co-	Un			
	$\mathbf{ple}$	$\operatorname{dom}$	opy	Style	Sup	$\mathbf{Self}$	Ours	Ideal
fbis.wc.arff(111,142)	0.962	0.921	0.931	0.918	0.991	0.993	0.993	0.995
fbis.wc.arff(111,189)	0.991	0.994	0.992	0.992	0.997	1	1	1
fbis.wc.arff $(142,189)$	0.965	0.932	0.91	0.933	0.979	0.966	0.997	0.973
new3s.wc(111,142)	0.961	0.93	0.928	0.94	0.993	0.995	0.994	0.998
new3s.wc(189,142)	0.907	0.935	0.923	0.893	0.979	0.975	0.994	0.987
new3s.wc(189,301)	0.931	0.8	0.828	0.894	0.941	0.851	0.969	0.957
ohscal.wc(An,Ca)	0.864	0.924	0.925	0.809	0.962	0.962	0.974	0.975
ohscal.wc(An,Dn)	0.862	0.812	0.831	0.773	0.92	0.917	0.946	0.946
ohscal.wc(Ca,Dn)	0.896	0.881	0.903	0.849	0.965	0.944	0.966	0.961
ohscal.wc(Ca,To)	0.859	0.824	0.791	0.837	0.935	0.925	0.955	0.944
units_ACEInhibitors	0.706	0.696	0.69	0.69	0.723	0.741	0.754	0.755
$units\_ADHD$	0.953	0.92	0.92	0.921	0.958	0.935	0.96	0.96
units_AtypicalAntipsychotics	0.598	0.633	0.625	0.603	0.631	0.657	0.68	0.709
$units\_ProtonPumpInhibitors$	0.704	0.713	0.72	0.629	0.647	0.784	0.776	0.786
$units\_Statins$	0.65	0.656	0.645	0.622	0.63	0.671	0.621	0.802
Average	0.854	0.838	0.837	0.82	0.883	0.888	0.912	0.917
			_	70 / T / T	1	_	1	
Methods	P-valu	$\mathbf{e}$		Meth	ioas	P-va	ılue	
	<b>?-valu</b> 591290€					<b>P-va</b> 0.9141		
Ours - Co-Style 8.6		e-06		Ours -			55300	
Ours - Co-Style 8.6 Ours - Entropy 9.7	691290e	e-06 e-04		Ours - Ours Ours -	Ideal - Self UnSup	0.9141 $0.0239$ $0.0121$	.55300 989818 .14262	
Ours - Co-Style 8.6 Ours - Entropy 9.7 Ours - Random 3.6	591290e 753817e	e-06 e-04 e-03	•	Ours - Ours Ours -	Ideal - Self UnSup	0.9141 $0.0239$	.55300 989818 .14262	
Ours - Co-Style 8.6 Ours - Entropy 9.7 Ours - Random 3.6	591290e 753817e 543670e 267348e	e-06 e-04 e-03 e-02		Ours - Ours Ours - Self -	Ideal - Self UnSup Ideal	0.9141 $0.0239$ $0.0121$	.55300 089818 .14262 020296	
Ours - Co-Style 8.6 Ours - Entropy 9.7 Ours - Random 3.6 Ours - Simple 4.2	591290 753817 543670 267348 515484	e-06 e-04 e-03 e-02 e-01		Ours - Ours Ours - Self - UnSup	Ideal - Self UnSup Ideal - Ideal	0.9141 $0.0239$ $0.0121$ $0.0029$	.55300 089818 .14262 020296 217282	
Ours - Co-Style 8.6 Ours - Entropy 9.7 Ours - Random 3.6 Ours - Simple 4.2 Entropy - Co-Style 8.6	591290 753817 543670 267348 515484	e-06 e-04 e-03 e-02 e-01		Ours - Ours Ours - Self - UnSup	Ideal - Self UnSup Ideal - Ideal	0.9141 $0.0239$ $0.0121$ $0.0029$ $0.0012$	.55300 089818 .14262 020296 217282	
Ours - Co-Style 8.6 Ours - Entropy 9.7 Ours - Random 3.6 Ours - Simple 4.2 Entropy - Co-Style 8.6 Random - Co-Style 6.6	591290 753817 543670 267348 515484	e-06 e-04 e-03 e-02 e-01		Ours - Ours Ours - Self - UnSup	Ideal - Self UnSup Ideal - Ideal	0.9141 $0.0239$ $0.0121$ $0.0029$ $0.0012$	.55300 089818 .14262 020296 217282	
Ours - Co-Style 8.6 Ours - Entropy 9.7 Ours - Random 3.6 Ours - Simple 4.2 Entropy - Co-Style 8.6 Random - Co-Style 6.6	591290 753817 543670 267348 515484	e-06 e-04 e-03 e-02 e-01		Ours - Ours Ours - Self - UnSup	Ideal - Self UnSup Ideal - Ideal	0.9141 $0.0239$ $0.0121$ $0.0029$ $0.0012$	.55300 089818 .14262 020296 217282	
Ours - Co-Style 8.6 Ours - Entropy 9.7 Ours - Random 3.6 Ours - Simple 4.2 Entropy - Co-Style 8.6 Random - Co-Style 6.6	591290 753817 543670 267348 515484	e-06 e-04 e-03 e-02 e-01		Ours - Ours Ours - Self - UnSup	Ideal - Self UnSup Ideal - Ideal	0.9141 $0.0239$ $0.0121$ $0.0029$ $0.0012$	.55300 089818 .14262 020296 217282	
Ours - Co-Style 8.6 Ours - Entropy 9.7 Ours - Random 3.6 Ours - Simple 4.2 Entropy - Co-Style 8.6 Random - Co-Style 6.6	591290 753817 543670 267348 515484	e-06 e-04 e-03 e-02 e-01		Ours - Ours Ours - Self - UnSup	Ideal - Self UnSup Ideal - Ideal	0.9141 $0.0239$ $0.0121$ $0.0029$ $0.0012$	.55300 089818 .14262 020296 217282	
Ours - Co-Style 8.6 Ours - Entropy 9.7 Ours - Random 3.6 Ours - Simple 4.2 Entropy - Co-Style 8.6 Random - Co-Style 6.6	591290 753817 543670 267348 515484	e-06 e-04 e-03 e-02 e-01		Ours - Ours Ours - Self - UnSup	Ideal - Self UnSup Ideal - Ideal	0.9141 $0.0239$ $0.0121$ $0.0029$ $0.0012$	.55300 089818 .14262 020296 217282	
Ours - Co-Style 8.6 Ours - Entropy 9.7 Ours - Random 3.6 Ours - Simple 4.2 Entropy - Co-Style 8.6 Random - Co-Style 6.6	591290 753817 543670 267348 515484	e-06 e-04 e-03 e-02 e-01		Ours - Ours Ours - Self - UnSup	Ideal - Self UnSup Ideal - Ideal	0.9141 $0.0239$ $0.0121$ $0.0029$ $0.0012$	.55300 089818 .14262 020296 217282	
Ours - Co-Style 8.6 Ours - Entropy 9.7 Ours - Random 3.6 Ours - Simple 4.2 Entropy - Co-Style 8.6 Random - Co-Style 6.6	591290 753817 543670 267348 515484	e-06 e-04 e-03 e-02 e-01		Ours - Ours Ours - Self - UnSup	Ideal - Self UnSup Ideal - Ideal	0.9141 $0.0239$ $0.0121$ $0.0029$ $0.0012$	.55300 089818 .14262 020296 217282	

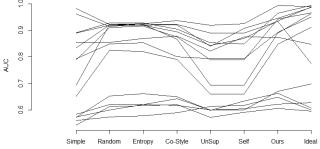
Random Entropy Co-Style UnSup

**Table 3.** Average AUC and P-values calculated by Friedman's and Nemenyi test on Text data sets (Setting: **10 labeled instances**, 50 attributes, Naïve Bayes)

	~.							
	Sim	Ran	Entr	Co-	$\operatorname{Un}_{\sim}$	~	_	
	$_{ m ple}$	$\mathbf{dom}$	opy	$\mathbf{Style}$	•		Ours	Ideal
fbis.wc.arff(111,142)	0.988	0.918	0.927	0.93	0.996	0.993	0.998	0.995
fbis.wc.arff(111,189)	0.998	0.99	0.993	0.992	1	1	1	1
fbis.wc.arff $(142,189)$	0.975	0.924		0.931	0.989	0.966	0.995	0.972
new3s.wc(111,142)	0.991	0.929	0.921	0.931	0.997	0.994	0.994	0.998
new3s.wc(189,142)	0.968	0.923	0.93	0.911	0.991	0.977	0.993	0.987
new3s.wc(189,301)	0.939	0.84	0.882	0.885	0.953	0.923	0.964	0.957
ohscal.wc(An,Ca)	0.885	0.927	0.929	0.847	0.946	0.959	0.974	0.975
ohscal.wc(An,Dn)	0.904	0.866	0.858	0.857	0.918	0.937	0.946	0.946
ohscal.wc(Ca,Dn)	0.906	0.892	0.898	0.858	0.956	0.946	0.972	0.961
ohscal.wc(Ca,To)	0.905	0.84	0.824	0.866	0.925	0.924	0.955	0.943
$units\_ACEInhibitors$	0.707	0.682	0.681	0.685	0.715	0.709	0.755	0.755
$\mathrm{units\_ADHD}$	0.951	0.92	0.92	0.923	0.956	0.935	0.963	0.96
units_AtypicalAntipsychotics	0.611	0.629	0.62	0.595	0.663	0.656	0.672	0.709
$units\_ProtonPumpInhibitors$	0.617	0.71	0.692	0.634	0.689	0.788	0.789	0.786
units_Statins	0.654	0.658	0.662	0.652	0.71	0.736	0.728	0.802
${f Average}$	0.867	0.843	0.845	0.833	0.894	0.896	0.913	0.917
Methods	P-valu	.e	_	Meth	ods	P-va	lue	
Ours - Co-Style 2.1	117069	e-06		Ours -	Ideal	0.8479	50316	
	262105	e-05		Ours	- Self	0.0001	71719	
2.0	659463	e-06		Ours -	UnSup	0.0130	07246	
Ours - Simple 4.3	388736	e-02			_	0.0045		
Entropy - Co-Style 9.4	440947	e-01		UnSup	- Ideal	0.1176	59114	
Random - Co-Style 9.9						0.6834		
8-				//				
			A					
AUC -								
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 ${\bf Table~4.~Average~AUC~and~P-values~calculated~by~Friedman's~and~Nemenyi~test~on~Text~data~sets~(Setting:~5~labeled~instances,~50~attributes,~{\bf J48})}$ 

	$\mathbf{Sim}$	Ran	Entr	Co-	$\mathbf{U}\mathbf{n}$			
	$\mathbf{ple}$	$\mathbf{dom}$	$\mathbf{opy}$	Style	$\mathbf{Sup}$	$\mathbf{Self}$	$\mathbf{Ours}$	Ideal
fbis.wc.arff(111,142)	0.962	0.916	0.924	0.921	0.908	0.841	0.946	0.987
fbis.wc.arff(111,189)	0.834	0.921	0.92	0.895	0.869	0.844	0.936	0.989
fbis.wc.arff $(142,189)$	0.982	0.922	0.925	0.937	0.925	0.919	0.994	0.989
new3s.wc(111,142)	0.891	0.928	0.928	0.904	0.848	0.854	0.965	0.995
new3s.wc(189,142)	0.854	0.855	0.87	0.878	0.875	0.823	0.875	0.847
new3s.wc(189,301)	0.789	0.911	0.916	0.875	0.789	0.789	0.943	0.966
ohscal.wc(An,Ca)	0.793	0.849	0.853	0.801	0.793	0.793	0.893	0.95
ohscal.wc(An,Dn)	0.693	0.923	0.923	0.867	0.693	0.693	0.89	0.963
ohscal.wc(Ca,Dn)	0.65	0.825	0.82	0.79	0.659	0.659	0.848	0.912
ohscal.wc(Ca,To)	0.572	0.652	0.661	0.649	0.633	0.598	0.662	0.607
units_ACEInhibitors	0.891	0.92	0.919	0.922	0.891	0.891	0.934	0.776
$units\_ADHD$	0.542	0.613	0.617	0.62	0.591	0.572	0.606	0.595
units_AtypicalAntipsychotic	s 0.583	0.62	0.62	0.642	0.6	0.6	0.67	0.699
units_ProtonPumpInhibitor	s 0.573	0.6	0.621	0.617	0.605	0.599	0.621	0.627
units_Statins	0.56	0.574	0.578	0.59	0.617	0.612	0.648	0.6
Average	0.745	0.802	0.806	0.794	0.753	0.739	0.829	0.833
Methods	P-valu	.e	_	Meth	ods	P-va	lue	
Ours - Co-Style 4	.433658	e-02		Ours -	Ideal	0.99163	246481	
	.294131	e-01		Ours -	Self	0.00013	307217	
= -	.580284	e-02	(	Ours - U	JnSup	0.03094	404987	
Ours - Simple 9	.933368	e-07		Self -	_	0.00058		
Entropy - Co-Style 9			τ	JnSup -	- Ideal	0.0675	156171	
Random - Co-Style 9						0.47214		
9			_	P				



 ${\bf Table~5.~Average~AUC~and~P-values~calculated~by~Friedman's~and~Nemenyi~test~on~Text~data~sets (Setting:~5~labeled~instances,~{\bf 100~attributes},~Na\"ive~Bayes)}$ 

	a.	ъ	ъ.					
	$\mathbf{Sim}$		Entr		Un	C 1C	0	T. 1
m: (f/111 140)	$\mathbf{ple}$			•	-		Ours	Ideal
fbis.wc.arff(111,142)	0.97			0.909	0.989		0.996	0.986
fbis.wc.arff(111,189)	0.983			0.956	0.993		1	1
fbis.wc.arff(142,189)	0.952			0.884			0.996	0.959
new3s.wc(111,142)	0.958			0.939		0.984	0.998	0.992
new3s.wc(189,142)	0.933	0.909				0.971	0.995	0.987
new3s.wc(189,301)	0.866			0.889		0.902	0.978	0.958
ohscal.wc(An,Ca)	0.866	0.887	0.902	0.822	0.952	0.947	0.974	0.962
ohscal.wc(An,Dn)	0.723			0.668	0.92	0.877	0.965	0.941
ohscal.wc(Ca,Dn)	0.87	0.919	0.923	0.834	0.94	0.951	0.971	0.975
ohscal.wc(Ca,To)	0.807	0.841	0.865	0.823	0.947	0.94	0.958	0.959
units_ACEInhibitors	0.719	0.691	0.692	0.715	0.75	0.765	0.791	0.805
$\mathrm{units\_ADHD}$	0.949	0.917	0.915	0.919	0.954	0.934	0.946	0.955
$units\_AtypicalAntipsychotics$	0.653	0.677	0.676	0.651	0.642	0.714	0.688	0.75
$units\_ProtonPumpInhibitors$	0.694	0.699	0.694	0.686	0.778	0.715	0.724	0.797
units_Statins	0.692	0.672	0.652	0.641	0.733	0.752	0.748	0.788
${f Average}$	0.842	0.838	0.84	0.817	0.896	0.89	0.915	0.921
Methods	-value	<del></del>	_	Meth	$\overline{\mathrm{ods}}$	P-v	alue	
Ours - Co-Style 3.7	29910e	-07		Ours -	Ideal	0.9989	991680	
Ours - Entropy 3.1	45261e	-04		Ours	- Self	0.003	915183	
Ours - Random 8.4	09118e	-04		Ours -	UnSup	0.036	169506	
Ours - Simple 1.0	80850e	-02		Self -	Ideal	0.002	242829	
Entropy - Co-Style 7.0	96187e	-01		UnSup	- Ideal	0.023	956682	
Random - Co-Style 5.6				-			325730	
0: 7			-					
6 -	7				1			
<u> </u>			16/2			7		
AUC - 0.8	/		1		_/	/		
₹ .   //			//					

Simple Random Entropy Co-Style UnSup

**Table 6.** Average AUC and P-values calculated by Friedman's and Nemenyi test On **Microarray data sets (3 labeled instances**, 50 attributes, Naïve Bayes)

	Sim	Ran	Entr	Co-	Un												
	$\mathbf{ple}$	$\mathbf{dom}$	$\mathbf{opy}$	Style	Sup	$\mathbf{Self}$	Ours	Idea									
Ovarian		0.918	0.948	0.935	0.99	0.991	0.998	0.990									
$OVA\_Uterus$		0.836	0.785	0.824		0.843	0.894	0.92									
$OVA\_Prostate$		0.935	0.939	0.948	0.925	0.944	0.971	0.99									
OVA_Ovary	0.774	0.863	0.85	0.861	0.855	0.841	0.888	0.92									
$OVA\_Omentum$	0.6	0.752	0.746	0.795	0.81	0.783	0.821	0.89									
$OVA\_Lung$	0.797	0.884	0.889	0.876	0.836	0.854	0.886	0.94									
OVA_Kidney	0.881	0.947	0.949	0.952	0.935	0.95	0.976	0.97									
$OVA\_Endometrium$	0.667	0.832	0.852	0.859	0.855	0.881	0.901	0.94									
$OVA\_Colon$	0.795	0.896	0.903	0.897	0.849	0.853	0.94	0.94									
$OVA\_Breast$	0.753	0.925	0.929	0.925	0.916	0.89	0.965	0.97									
AP_Uterus_Kidney	0.986	0.964	0.958	0.967	0.986	0.987	0.993	0.99									
AP_Prostate_Uterus	0.988	0.994	0.993	0.993	0.991	0.991	0.999	0.99									
AP_Prostate_Ovary	0.99	0.979	0.981	0.985	0.99	0.984	0.994	0.98									
AP_Prostate_Lung	0.989	0.962	0.962	0.99	0.976	0.98	0.995	0.97									
AP_Prostate_Kidney	0.98	0.969	0.965	0.973	0.978	0.981	0.991	0.99									
AP_Ovary_Uterus	0.667	0.848	0.873	0.828	0.878	0.891	0.905	0.92									
AP_Ovary_Lung		0.929	0.933	0.898	0.958	0.96	0.971	0.95									
AP_Ovary_Kidney		0.922	0.91	0.891	0.984	0.984	0.984	0.98									
AP_Omentum_Uterus		0.895	0.888	0.904	0.958	0.94	0.963	0.95									
AP_Omentum_Ovary		0.744			0.785	0.804	0.822	0.83									
AP_Omentum_Lung	0.909	0.9		0.877		0.966	0.97	0.96									
AP_Omentum_Kidney		0.977	0.974	0.974		0.963	0.974	0.98									
AP_Lung_Uterus	0.89	0.937	0.926	0.921	0.975	0.976	0.986	0.96									
AP_Lung_Kidney		0.966	0.963	0.944	0.989	0.989	0.994	0.99									
.P_Endometrium_Uterus			0.715	0.591	0.798	0.816	0.828	0.86									
AP_Endometrium_Ovary			0.85	0.814		0.881	0.928	0.95									
AP_Endometrium_Lung		0.949	0.953	0.957		0.981	0.986	0.98									
P_Endometrium_Kidney			0.979	0.988	0.978	0.977	0.998	0.98									
AP_Endometrium_Colon			0.973	0.968	0.959	0.957	0.979	0.98									
P_Endometrium_Breast			0.934	0.944	0.96	0.951	0.975	0.97									
AP_Colon_Uterus		0.956	0.963	0.944 $0.927$	0.966	0.965	0.982	0.97									
AP_Colon_Prostate		0.982	0.903	0.988	0.988	0.989	0.982 $0.996$	0.99									
AP_Colon_Ovary		0.962 $0.894$	0.90	0.88	0.929	0.928	0.966	0.96									
AP_Colon_Omentum	0.800	0.915	0.908	0.917	0.943	0.920	0.956	0.90									
AP_Colon_Lung		0.913	0.956	0.917 $0.947$	0.943 $0.971$	0.942 $0.968$	0.982	0.95 $0.97$									
AP_Colon_Kidney	0.983		0.930 $0.978$	0.947 $0.955$	0.986	0.988	0.982 $0.994$	0.98									
AP_Breast_Uterus			0.945	0.933 $0.911$		0.95	0.964	0.96									
AP_Breast_Prostate							0.994	0.99									
AP_Breast_Ovary				0.938			0.988	0.97									
AP_Breast_Lung		0.935		0.933		0.91	0.932	0.93									
AP_Breast_Lung	0.9		0.925		0.967	0.958	0.976	0.96									
AP_Breast_Kidney		0.963		0.924	0.98	0.98	0.984	0.98									
AP_Breast_Colon		0.957	0.96	0.959	0.99	0.987	0.991	0.98									
Average			0.918	0.911				0.96									
	.35852				- Idea		8115e-01										
10	.52004				s - Self		8843e-09										
	.60173					_	7753e-09										
*	000000				- Ideal		9215e-07										
Entropy - Co-Style 9							6622e-07										
Random - Co-Style 9	.99975	3e-01		UnSu	ıp - Sel	f 9.997	7912e-01	_									
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Table 7. Average AUC and P-values calculated by Friedman's and Nemenyi test On Microarray data sets (5 labeled instances, 50 attributes, Naïve Bayes)

	Sim	Ran	Entr	Co-	$\mathbf{U}\mathbf{n}$			
	ple	dom	ору	Style	_	Self	Ours	Ide
Ovarian	0.936	0.98	0.976	0.972	0.991	0.991	0.998	0.99
OVA_Uterus	0.803	0.833	0.836	0.817	0.874		0.887	0.9
OVA_Prostate	0.956	0.928	0.933	0.935		0.943	0.972	0.99
OVA_Ovary	0.891	0.833	0.846	0.843		0.824	0.881	0.92
OVA_Omentum	0.804	0.777	0.759	0.797	0.763	0.757	0.809	0.89
OVA_Lung	0.93	0.855	0.861	0.846	0.803	0.829	0.863	0.94
OVA_Kidney	0.97	0.921	0.921	0.935	0.916	0.937	0.976	0.97
OVA_Endometrium	0.868	0.84	0.848	0.86	0.863	0.866	0.9	0.94
OVA_Colon	0.917	0.862	0.864	0.87	0.837	0.854	0.933	0.94
OVA_Breast	0.955	0.886	0.888	0.902		0.883	0.966	0.97
AP_Uterus_Kidney	0.973	0.976	0.98	0.979	0.984		0.993	0.9
AP_Prostate_Uterus	0.991	0.991	0.99	0.993	0.993	0.993	0.999	0.99
AP_Prostate_Ovary	0.99	0.973	0.97	0.984		0.987	0.993	0.98
AP_Prostate_Lung	0.968	0.953	0.954	0.974	0.977	0.974	0.992	0.97
AP_Prostate_Kidney	0.98	0.958	0.956	0.972	0.981	0.98	0.987	0.99
AP_Ovary_Uterus	0.908	0.872	0.876	0.862	0.898	0.861	0.92	0.92
AP_Ovary_Lung	0.947	0.932	0.913	0.928	0.965	0.957	0.978	0.95
AP_Ovary_Kidney	0.981	0.963	0.963	0.964	0.983	0.985	0.985	0.98
AP_Omentum_Uterus	0.91	0.884	0.898	0.92	0.954	0.922	0.967	0.95
AP_Omentum_Ovary	0.755	0.738	0.744		0.811	0.799	0.833	0.82
AP_Omentum_Lung	0.945	0.903	0.91	0.892	0.96	0.965	0.97	0.96
AP_Omentum_Kidney	0.972	0.98	0.976	0.971	0.977	0.976	0.979	0.98
AP_Lung_Uterus	0.965	0.952	0.942	0.93	0.982	0.977	0.984	0.96
AP_Lung_Kidney	0.951	0.967	0.973	0.964		0.989	0.994	0.99
AP_Endometrium_Uterus	0.704	0.818	0.759	0.761	0.835	0.769	0.879	0.87
AP_Endometrium_Ovary	0.859	0.847	0.843	0.863	0.909	0.827	0.933	0.9
AP_Endometrium_Lung	0.977	0.954	0.956	0.959	0.978	0.978	0.985	0.98
AP_Endometrium_Kidney AP_Endometrium_Colon	0.986 $0.94$	0.975 $0.964$	0.971	0.98	0.974	0.975	0.997	0.98
			0.964	0.966	0.961	0.959	0.978	0.98
AP Colon III and	0.953	0.923	0.925	0.941	0.953	0.943	0.977	0.97
AP_Colon_Uterus	0.972	0.954	0.96	0.961	0.975	0.966	0.983	0.97
AP_Colon_Prostate	0.993	0.98	0.98	0.983	0.99	0.99	0.996	0.99
AP_Colon_Ovary	0.905	0.896	0.907	0.904	0.93	0.925	0.955	0.96
AP_Colon_Omentum	0.926	0.919	0.912	0.927	0.931	0.937	0.952	0.95
AP_Colon_Lung	0.968	0.955	0.953	0.951	0.972 $0.986$	0.969 $0.988$	0.983	0.97
AP_Colon_Kidney	0.985	0.981	0.983	0.985			0.995	0.98
AP_Breast_Uterus	0.943	0.926	0.93		0.957	0.949	0.971	0.96
AP_Breast_Prostate				0.974			0.986	0.99
AP_Breast_Ovary	0.964	0.96		0.967			0.986	0.97
AP_Breast_Omentum	0.944		0.92		0.913		0.933	0.93
AP_Breast_Lung			0.938			$0.96 \\ 0.983$	0.974	0.96
AP_Breast_Kidney		0.971		0.97 $0.963$	0.98	0.985 $0.987$	0.981	0.98
AP_Breast_Colon			0.961				0.992	0.98
Average			0.919				0.958	0.96
v	.33699				- Ideal		8465e-01	
10	.99680				s - Self		)589e-12	
	.11022						1946e-08	
*	5.52191				- Ideal		3284e-07	
Entropy - Co-Style 4							7455e-04	
Random - Co-Style 1	.80336	oe-01		UnSu	p - Sel	1 5.921	200e-01	
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96							<b>3</b>	
<u></u> ←3						<i>7-11</i>	_	
06.0			~~	$\leq_{\mathcal{A}}$	ZH.	[A-+	_	
AUC 0.85		$\sim$	$\leq$	Z	4//		_	
0.80			$\sim$	$\rightarrow$	S	/		
	<i></i>		$\longrightarrow$	<	_/			
0.70 0.75			/					

**Table 8.** Average AUC and P-values calculated by Friedman's and Nemenyi test On **Microarray data sets (10 labeled instances**, 50 attributes, Naïve Bayes)

	Sim	Ran	Entr	Co-	Un			
	$\mathbf{ple}$	$\mathbf{dom}$	$\mathbf{opy}$	Style	$\mathbf{Sup}$	$\mathbf{Self}$	Ours	Ideal
Ovarian	0.985	0.98	0.978	0.978	0.991	0.991	0.998	0.996
$OVA\_Uterus$	0.825	0.83	0.844	0.829	0.87	0.832	0.91	0.919
$OVA_Prostate$	0.969	0.935	0.938	0.94	0.939	0.948	0.974	0.992
OVA_Ovary	0.879	0.851	0.849	0.846	0.851	0.839	0.881	0.923
$OVA\_Omentum$	0.666	0.748	0.765	0.77	0.746	0.789	0.792	0.899
OVA_Lung	0.829	0.852	0.856	0.866	0.799	0.842	0.855	0.941
$OVA\_Kidney$	0.951	0.928	0.928	0.928	0.923	0.936	0.973	0.978
$OVA\_Endometrium$	0.906	0.858	0.859	0.856	0.858	0.877	0.898	0.945
$OVA\_Colon$	0.88	0.866	0.863	0.887	0.842	0.858	0.935	0.947
$OVA\_Breast$	0.929	0.882	0.888	0.891	0.942	0.891	0.965	0.971
AP_Uterus_Kidney	0.982	0.98	0.981	0.981	0.986	0.984	0.992	0.99
$AP_Prostate_Uterus$	0.994	0.991	0.991	0.993	0.991	0.991	0.998	0.993
AP_Prostate_Ovary	0.98	0.966	0.956	0.986	0.987	0.987	0.99	0.985
AP_Prostate_Lung	0.99	0.948	0.95	0.977	0.981	0.978	0.991	0.978
AP_Prostate_Kidney	0.989	0.959	0.958	0.969	0.981	0.981	0.987	0.992
AP_Ovary_Uterus	0.928	0.866	0.884	0.884	0.886	0.903	0.934	0.922
AP_Ovary_Lung	0.951	0.943	0.921	0.945	0.963	0.965	0.974	0.954
AP_Ovary_Kidney	0.985	0.959	0.968	0.966	0.984	0.987	0.982	0.989
$AP\_Omentum\_Uterus$	0.931	0.887	0.884	0.899	0.944	0.933	0.966	0.953
AP_Omentum_Ovary	0.823	0.735	0.748	0.733	0.81	0.799	0.833	0.827
AP_Omentum_Lung	0.968	0.917	0.922	0.921	0.969	0.97	0.97	0.969
AP_Omentum_Kidney	0.983	0.977	0.972	0.976	0.978	0.977	0.979	0.984
AP_Lung_Uterus	0.974	0.954	0.946	0.944	0.978	0.971	0.983	0.965
AP_Lung_Kidney	0.988	0.976	0.978	0.958	0.989	0.99	0.994	0.995
AP_Endometrium_Uterus	0.752	0.821	0.812	0.803	0.865	0.837	0.897	0.878
$AP\_Endometrium\_Ovary$	0.874	0.857	0.853	0.88	0.906	0.864	0.944	0.952
AP_Endometrium_Lung	0.981	0.956	0.956	0.957	0.984	0.981	0.986	0.984
AP_Endometrium_Kidney	0.985	0.975	0.974	0.979	0.974	0.978	0.999	0.987
AP_Endometrium_Colon	0.976	0.964	0.962	0.969	0.965	0.964	0.983	0.985
$AP\_Endometrium\_Breast$	0.98	0.932	0.932	0.955	0.94	0.944	0.977	0.975
AP_Colon_Uterus	0.975	0.953	0.957		0.975	0.968	0.981	0.973
AP_Colon_Prostate	0.99	0.979	0.98	0.984	0.988	0.989	0.995	0.995
AP_Colon_Ovary	0.955	0.918	0.911	0.916	0.937	0.938	0.97	0.967
AP_Colon_Omentum	0.934	0.923	0.92	0.928	0.933	0.937	0.957	0.949
AP_Colon_Lung	0.967	0.946	0.963	0.955	0.968	0.968	0.983	0.972
AP_Colon_Kidney	0.985	0.983	0.983	0.983	0.985	0.99	0.994	0.987
AP_Breast_Uterus	0.959	0.936	0.936	0.943	0.957	0.951	0.969	0.967
AP_Breast_Prostate	0.98	0.948	0.956	0.972	0.981	0.984	0.994	0.993
AP_Breast_Ovary	0.977	0.964	0.964	0.968	0.972	0.974	0.986	0.977
$AP\_Breast\_Omentum$	0.931	0.911	0.917	0.924	0.911	0.91	0.934	0.93
AP_Breast_Lung	0.957	0.948	0.939	0.946	0.967	0.961	0.97	0.963
AP_Breast_Kidney	0.983	0.973	0.971	0.969	0.98	0.98	0.983	0.985
AP_Breast_Colon	0.963	0.966	0.957	0.959	0.987	0.983	0.988	0.989
Average	0.939	0.922	0.923	0.927	0.939	0.938	0.959	0.963
	5.15884				- Idea		217e-01	
v	1.11022				s - Self		162e-10	
	1.11022			Ours -	- UnSu		313e-11	
	1.16960				- Ideal	_	623e-06	
Entropy - Co-Style 3						-	8770e-07	
Random - Co-Style 3							.074e-01	
# 7 <b>*</b>				a				
						, .		
0.95								
06:0				Z/5	Z/);		_	
2	<b>&gt;&gt;=</b>				4		-	
AUC 88 0.6				$\sim$	~_/		-	

Random Entropy Co-Style

Ours

Ideal